Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

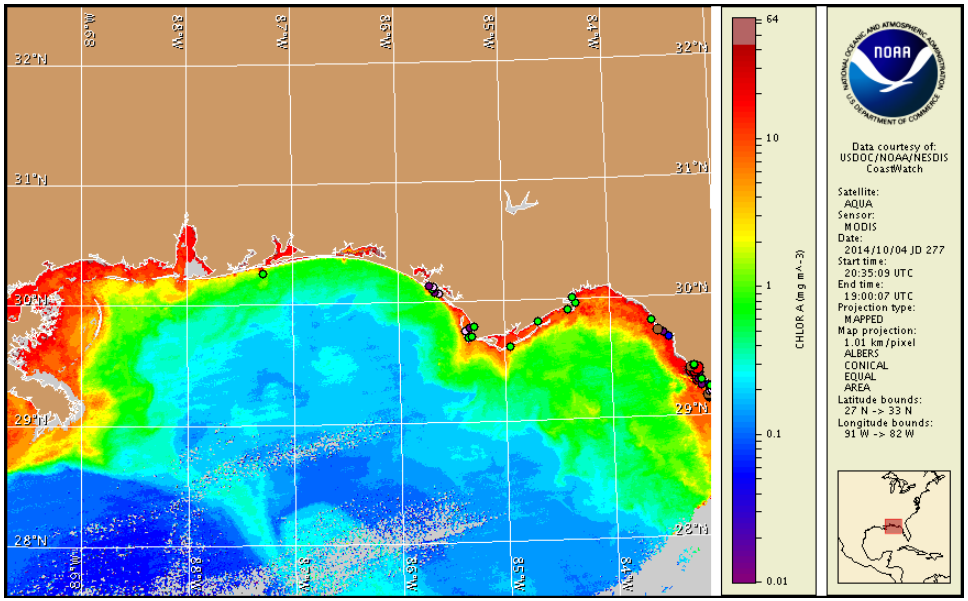
Monday, 06 October 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 2, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 26 to October 2: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest and southwest Florida from Bay to Citrus counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for alongshore northwest Florida Monday, October 6 through Thursday, October 9 is listed below:

County Region: Forecast (Duration)
Bay: Very Low (M-Tu, Th), None (W)
Gulf: Very low (M-Tu, Th), None (W)
Taylor: Low (M-Tu, Th), Very Low (W)
All Other NWFL County Regions: None expected (M-Th)
SWFL County Regions: Visit http://tidesandcurrents.noaa.gov/hab/#swfl

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Over the past several days, reports of dead fish were received from offshore Wakulla and Franklin counties.

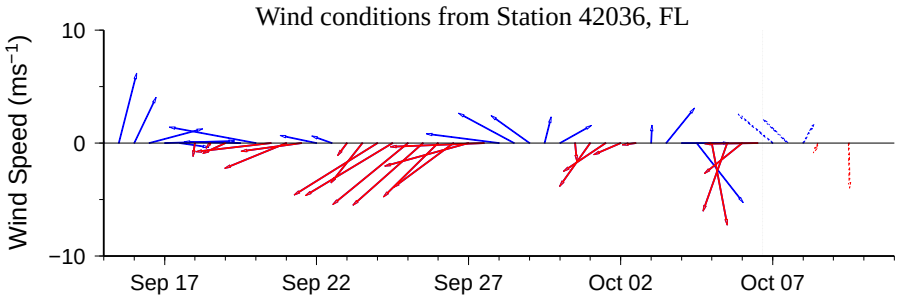
Analysis

Recent samples collected along- and offshore northwest Florida (Escambia to Taylor counties) identified not present to 'very low a' *Karenia brevis* concentrations and indicate that the *K. brevis* bloom has continued to move northwestward and is now present in Bay and Gulf counties. Samples collected last week identified up to 'very low a' *K. brevis* concentrations within St. Andrew Bay of Bay County, with the highest concentrations east of Spanish Ante (FWRI; 9/29). Not present to 'very low a' *K. brevis* concentrations were also identified in St. Joseph Bay of Gulf County, with the highest concentration located mid-bay, west of Oak Grove (FWRI; 9/30). One sample collected 2 miles southwest of Keaton Beach in Taylor County indicated that *K. brevis* was not present (FWRI; 9/30). Several reports of *K. brevis* related fish kills were received from offshore Wakulla and Franklin counties over the past several days (FWRI; 10/2-10/3). No respiratory irritation associated with *K. brevis* has been reported along the coast of northwest Florida (MML; 10/2-10/6).

In recent MODIS Aqua imagery (10/4; shown left), patches of elevated to very high chlorophyll (2 to >20 μg/L) are visible along- and offshore from Bay to Taylor County. Due to the optical characteristics that are typical in the area, elevated chlorophyll is not necessarily indicative of the presence of *K. brevis*, and some elevated chlorophyll may also be due to the resuspension of benthic chlorophyll and sediments along the coast.

South to southeast winds forecasted over the next several days may promote northerly transport of *K. brevis* concentrations.

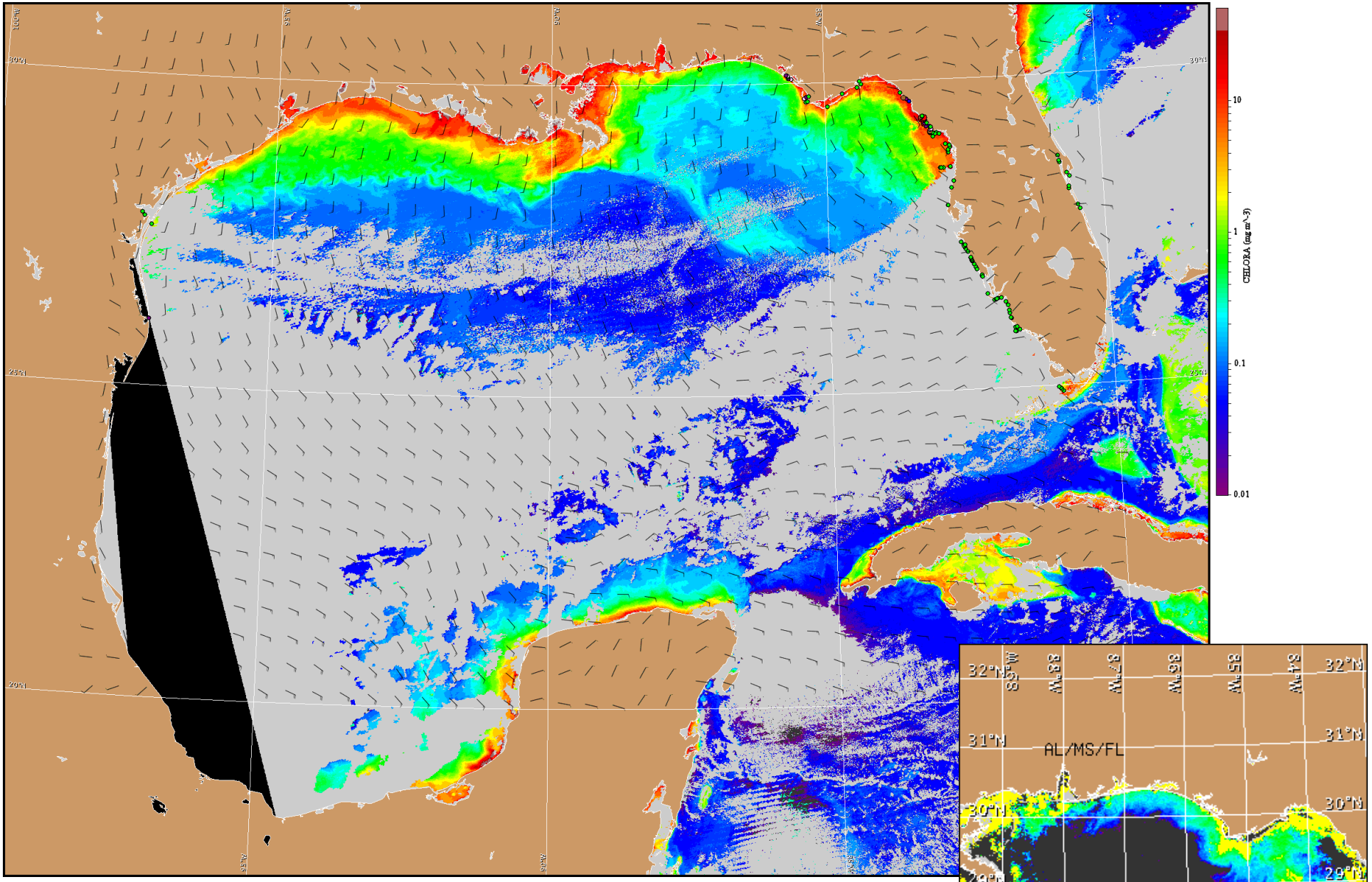
Davis, Derner



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Okaloosa to Taylor counties: Southeast winds (5-15kn, 3-8m/s) today. South to southeast winds (5-10kn, 3-5m/s) Tuesday. Northeast winds (5kn, 3m/s) Wednesday becoming southwest winds in the afternoon. Southeast winds (5kn) Wednesday night becoming east winds after midnight. East to southeast winds (5-15kn) Thursday.



Satellite chlorophyll image and forecast winds for October 7, 2014 12Z with points representing cell concentration sampling data from September 26 to October 2: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:
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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).